



TQ LENS

LIQUIDITY AGGREGATION SERVICE DESCRIPTION

LP Service Description

VERSION 1.6

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1. About the Liquidity Aggregation Service ("The Service")

Turquoise Global Holdings Limited ("Turquoise") has been authorised by the Financial Services Authority (the "FSA") to arrange deals in investments and to trade as principal and as such offers the Service which is a pan-European smart order router ("SOR") designed to find liquidity and execution opportunities for non-display orders by utilising liquidity in a number of Turquoise Members and the Turquoise MTF.

The Service key features are:

- Applies to banks, brokers and multilateral trading facilities offering non-display algorithms;
- Access for Customers is via the Service specific FIX 4.2 Gateway and the Service will comply with each Liquidity Partner's ("LP") specification for connecting to their liquidity pool;
- All trades will be cleared through a CCP connected to Turquoise MTF, with any counterparty risk absorbed at the point of execution;
- For the purposes of the Service all executions will be reported to the Turquoise MTF under Rule 5.13 of Turquoise Rules, and will be regarded as Negotiated Trades as defined by the Markets in Financial Instruments Directive 2004/39/EC.

2. About this Document

The objective of this document is to provide an understanding of the Service's most relevant Technical, Operational and Business features.

This document is not intended to be used as a Technical Specification for the development of any software application.

Furthermore, this document may be amended from time to time.

For any feedback or questions about this document please contact [TQ Sales](#).



3. Products and Reference Data

3.1. Currencies and Lines Traded

3.1.1. The Service offers Pan-European trading in approximately 2000 securities and ETFs currently supported by the TQ Dark Midpoint Order Book, and includes securities from the following Markets:

- Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and United Kingdom

3.1.2. Each LP may choose to support either the complete offering or a subset of the securities.

3.1.3. On a daily basis prior to trading each LP may optionally transfer a file stating the securities it wishes to support.

All securities traded on the Turquoise MTF will be assumed to be supported by an LP unless otherwise explicitly stated by the LP.

3.1.4. Where multiple lines exist for a security, the Service will support the Security/Currency combinations traded on the Turquoise MTF.

3.2. Reference Data/ Security Identification

3.2.1. Translation to each LP's naming scheme is supported within the system. Conventions automatically supported are:

- ISIN
- RIC

If you require an additional naming scheme please contact your [Technical Account Manager](#) who will be able to process the request.

4. Liquidity Providers

4.1. Executions

- 4.1.1. Where confirmation of an Execution¹, for either part or all of the Order, is received via the System from the LP (“LP OTC Transaction”), the System will simultaneously generate a corresponding OTC Transaction between Turquoise and the Customer on equivalent terms to the Liquidity Partner OTC Transaction (“Customer OTC Transaction”).
- 4.1.2. All Executions shall be reported to the Turquoise MTF pursuant to the Turquoise Rule Book, specifically rule 5.13, and will be regarded as negotiated transactions as defined under MIFID,

4.2. Clearing and Settlement

4.2.1. Clearing Instructions

All trades will be submitted to a customer’s designated CCP for Clearing and Settlement and will follow the applicable eligibility criteria of the CCP. Where a trade fails to be novated in accordance with such criteria, Turquoise will contact the parties to obtain consent to disclose, in respect of such Clearing Transaction, to each of the Customer and the Liquidity Partner their respective identities in order that such counterparties may settle such Transaction directly.

If a party refuses to settle the Transaction bilaterally, the Transaction will be deemed erroneous and will be cancelled (please refer to the Clearly Erroneous Execution Policy).

For each trade executed by an LP from an order routed to it in the name of Turquoise through the Service, Turquoise will enter into a corresponding trade with the customer and give-up the trades generating a single transaction to be sent to a CCP connected to Turquoise MTF.

The transaction will be brought under the rules of the Turquoise negotiated trade waiver and subsequently regarded by the CCP as a Turquoise MTF negotiated transaction between a Customer (being a Participant or Non-Clearing Firm) and an LP (being a Participant or Non-Clearing Firm).

- 4.2.2. Turquoise is required to report to the regulatory authorities any Clearing Transaction created pursuant to the System as two transactions:
- a) the LP OTC Transaction; and
 - b) the Customer OTC Transaction,

However, only a single Clearing Transaction between the Customer and the LP has been formed.

4.2.3. Settlement Instructions

All trades executed will be settled by the CCP according to their rules.

Non-standard settlement instructions are not supported.

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¹ a single Transaction between the Customer and the Liquidity Partner will be deemed to have occurred, on an anonymous basis, at the time that the System receives confirmation of the Execution of the Liquidity Partner OTC Transaction and on equivalent terms as the Liquidity Partner OTC Transaction



4.3. Trade Reporting

- 4.3.1. Turquoise assumes responsibility to report all trades executed with LPs to a valid trade reporting facility or Trade Data Monitor (“TDM”), identifying Turquoise MTF as the venue of the negotiated trade.

4.4. Transaction Reporting

- 4.4.1. The Service will report all transactions to the FSA at the end of each operational day, identifying Turquoise MTF as the venue.

A transaction report will be generated for the execution between:

- c) The LP and Turquoise; and
 - d) Turquoise and the Customer.
- 4.4.2. LPs are obliged to transaction report any executions occurring between Turquoise and themselves as a negotiated trade and identify Turquoise MTF as the venue.

4.5. Risk Management and Exposure Monitoring

- 4.5.1. Counterparty risk is managed by the designated CCP at the point of execution.



5. Order Types

This section defines the types of orders that will be routed to LPs in terms of the key attributes that will determine their behaviour and handling:

- Customer
- Visibility
- Duration (Time in Force)
- Price – Pegged and cap/floor limit
- Size – MAQ and minimum value

5.1. Customer

5.1.1. Turquoise will act as Principal on all transactions.

5.1.2. Customers, including an LP's own participant, will be anonymous to all LPs.

5.2. Visibility

5.2.1. Orders will be non-display only and will access LP's non-display algorithms. The Service does not limit LP discretion in executing the order subject to the order remaining dark or non-displayed within the LP and there being appropriate information barriers in place.

5.3. Duration (Time in Force)

5.3.1. Orders will be Good Till Day; valid until cancelled by the LP or cancelled by the Service. The Service reserves the right to cancel any or all orders sent to a LP either electronically or by calling the LP Help Desk at its sole discretion.

5.4. Price

5.4.1. Orders will be pegged to the primary market on which the stock maintains its listing ("Benchmark"), such that any execution is within the spread of the Benchmark. Delayed reporting of execution to the Service is not permitted.

5.4.2. Orders will be without offset.

5.4.3. Orders may have a cap/floor price, if supported by the LP. If reached, the pegging will stop as long as the Benchmark spread is more aggressive than this price.

The order should then remain executable at the cap/floor price or a less aggressive price. The pegging of the order to its Benchmark can resume when the Benchmark spread becomes less aggressive than the cap/floor price.



5.5. Minimum Acceptable Quantity (“MAQ”)

- 5.5.1. Orders may have a MAQ, if supported by the LP. The MAQ is an explicit quantity that will be less than or equal to the order quantity.

An order with MAQ must only be matched subject to, at a minimum, fulfilling its MAQ constraint with one or multiple orders but within the same execution cycle. If an order with an MAQ of 1,000 shares is sent to a LP, the LP can execute 100, 500, and 400 shares against multiple orders as long as these executions are within the same execution cycle and reported as such to the Service.

5.6. LP Specific Value Minimum

- 5.6.1. Each LP can specify a minimum order value which it is prepared to receive. This is a single value for all orders, specified in Euros, that is applied to all securities.

Prior to submitting an order to any LP the Service will verify that the order satisfies all LP Specific Value Minimums.

- 5.6.2. The Service will use the Reuters end of day exchange rates from the previous trading day to convert the LP Specific Value Minimum from Euros to the traded currency.

6. Order Handling

6.1. Order Entry

6.1.1. Customer orders will be routed pursuant to the Customer's permitted LP destinations and the order properties.

6.1.2. An insert acknowledgement should be generated once the order has been accepted by the LP or a rejection message if invalid or unsupported.

For further details please refer to our *Acknowledgment Policy*.

6.1.3. LPs have the right to refuse orders routed from specific Customers; this forms part of the Customer on-boarding process. Once admitted as a Customer, Customers will be anonymous to all LPs and orders will be sent by Turquoise as Principal.

6.2. Order Amendment

6.2.1. The Service does not support an order amend facility. Any Customer amendment request will be treated as cancel-new.

6.3. Order Cancellation

6.3.1. Orders can be cancelled at any time.

6.3.2. A cancel request must be confirmed by the LP once cancellation is successful. For further details please refer to *Acknowledgment Policy*.

6.3.3. Although cancellations can be requested at any time via the Service Help Desk, most often cancels will be requested at order expiry, on receipt of a Customer cancellation request or upon disconnection and when the Service determines the need to re-balance the remaining parent order quantity across the available LPs.

6.4. Order Cancellation/Rejection

6.4.1. Turquoise will closely monitor cancellations and rejections for each LP. Numerous occurrences may result in a decision by Turquoise to exclude the LP as a destination for orders until such time as any issues are resolved or the behaviour is rectified.

6.5. Execution Price

6.5.1. Turquoise will also monitor execution prices against the Benchmark spread held by Turquoise MTF at the time of the execution to ensure execution price quality.

7. Tariff Model

7.1. Rebate determination

- 7.1.1. The Service offers a range of differentiated routing strategies which can be selected on an order by order basis.

The standard offering is a differentiation by order size into a “Flow” or “Block” category.

7.1.2. Flow Orders

A Flow order is defined as any order specifying the Flow tariff in the Customer order. The order will only be distributed to LPs accepting the corresponding Flow order rebate.

Flow orders are not value restricted and any execution of a Flow order will provide a rebate of 0.25bps.

7.1.3. Block Orders

A Block order is defined as any order specifying the Block tariff in the Customer order. The order satisfies the rebate requirement for all LPs and therefore is valid for accessing all LPs.

Block orders must satisfy a minimum value check on order entry to the Service which will be a % of Large in Scale (“LIS”) as specified by CESR. A Block order may be distributed in child orders that are smaller than the minimum value. Any execution of a Block order will provide a rebate of 2.00bps.

Initially, the minimum value to qualify as Block will be 10% of LIS.

- 7.1.4. The rebate will not be specified in the order message from the Service, but will be reflected in monthly invoices.
- 7.1.5. It will not be possible for an LP to differentiate between Flow and Block orders at the point of receipt.

8. Service Policies and Procedures

8.1. Clearly Erroneous Execution Policy (“CEEP”)

8.1.1. Turquoise will monitor executions in real time to assist in the identification of clearly erroneous executions. Clearly erroneous executions will be dealt with pursuant to the terms of the CEEP.

8.1.2. Executions received from LPs after an order has 1) been cancelled by the Service and in line with the policy outlined at 8.3 below; or 2) been manually confirmed as cancelled by the LP, will be deemed to be clearly erroneous and reversed.

The LP will be responsible for such an execution.

8.1.3. Executions received from LPs at a price outside of the Primary Market spread, as held by Turquoise MTF, at the time of the execution will be deemed to be clearly erroneous and reversed.

8.2. Disconnection Policy and Procedure

8.2.1. Cancel on Disconnect is the default behaviour for the Service where supported by the LP.

8.2.2. Any disconnection will prompt intervention from Turquoise to ensure that all open orders are cancelled and all executions that have occurred are declared.

8.2.3. Once an LP is contacted by Turquoise the final status of all orders must be confirmed within 1 (one) minute i.e. all order must be cancelled or filled.

Any order whose status is unknown and not declared to Market Operations within 1 (one) minute of the LP being contacted will be regarded as cancelled.

8.2.4. Any subsequent executions will be regarded as invalid and will be dealt with pursuant to the CEEP.

8.3. Acknowledgment Policy

8.3.1. Turquoise will closely monitor the acknowledgment response performance of each connected LP for order entry and cancellation requests. Systematic failure to respond within the specified threshold will result in the LP being excluded from the Service until the behaviour is resolved.

8.3.2. Any order entry request that is not met by a response from a connected LP within the specified Acknowledgement Threshold will be treated as entered by the system.

Initially, the Acknowledgement Threshold will be 2 seconds.

8.3.3. Any order cancellation request that is not met by a response from a connected LP within the specified Cancel Threshold will be treated as cancelled by the system.

If the cancellation request was sent prior to a re-balancing, the LP will not be included in the re-balancing.

Any execution received from an LP after the Cancel Threshold will be dealt with pursuant to the CEEP.

Initially, the Cancel Threshold will be 5 seconds.



9. Definitions

“**Central Counterparty**” means European Central Counterparty Limited or any other Recognised (Overseas) Clearing House as may be added to the Service;

“**Clearly Erroneous Execution Policy**” means the policy pursuant to which an execution may be cancelled by Turquoise upon the request of a Customer;

“**Clearing Transaction**” means a transaction which is intended to be novated subject to and pursuant to the rules and eligibility criteria of the Central Counterparty;

“**Customer**” means a customer of the Service;

“**Execution**” means the successful completion of a buy or sell order for a Security;

“**General Clearing Member**” means an entity who is a participant of the Central Counterparty that clears transactions for itself and/or other entities;

“**System**” means the system operated by Turquoise to provide the Service;

“**System Gateway**” means the point-to-point connectivity between the System and the Liquidity Partner;

“**MiFID**” means the Markets in Financial Instruments Directive 2004/39/EC;

“**MTF**” means Multilateral Trading Facility as defined under MiFID;

“**Order**” means the instruction for the purchase or sale of a Security;

“**Security**” or “**Securities**” means any transferable stock, share or unit listed on a primary market exchange;

“**Service Description**” means the document describing the terms pursuant to which the Service is offered;

“**Turquoise MTF**” means the MTF operated by Turquoise;

“**Transaction**” means the Execution between the buyer and the seller for the exchange of Securities for payment;

“**Turquoise Rule Book**” means the set of rules adopted by Turquoise for the operation of the Turquoise MTF, as amended from time to time.